

$S_o$  means the concentration of the test compound in the total diet of test animals that corresponds to a maximum lifetime risk of cancer in the test animals of 1 in 1 million. For the purpose of this subpart, FDA will also assume that this  $S_o$  will correspond to the concentration of residue of carcinogenic concern in the total human diet that represents no significant increase in the risk of cancer to people.

*Sponsor* means the person or organization proposing or holding an approval by FDA for the use of a sponsored compound.

*Sponsored compound* means any drug or food additive or color additive proposed for use, or used, in food-producing animals or in their feed.

*Target animals* means the production class of animals in which a sponsored compound is proposed or intended for use.

*Target tissue* means the edible tissue selected to monitor for residues in the target animals, including, where appropriate, milk or eggs.

*Test animals* means the species selected for use in the toxicity tests.

*Threshold assessment* means FDA's review of data and information about a sponsored compound to determine whether chronic bioassays in test animals are necessary to resolve questions concerning the carcinogenicity of the compound.

#### **§ 500.84 Operational definition of "no residue".**

(a) On the basis of the results of the chronic bioassays and other information, FDA will determine whether any of the substances tested are carcinogenic.

(b) If FDA concludes that the results of the bioassays do not establish carcinogenicity, then FDA will not subject the sponsored compound to the remainder of the requirements of this subpart.

(c) For each sponsored compound that FDA decides should be regulated as a carcinogen, FDA will analyze the data from the bioassays using a statistical extrapolation procedure.

(1) For each substance tested in separate bioassays, FDA will calculate the concentration of the residue of carcinogenic concern that corresponds to a

maximum lifetime risk to the test animal of 1 in 1 million. FDA will designate the lowest value obtained as  $S_o$ .

(2) FDA will consider that "no residue" of the compound remains in the edible tissue when conditions of use of the sponsored compound, including any required preslaughter withdrawal period or milk discard time, ensure that the concentration of the residue of carcinogenic concern in the total diet of people will not exceed  $S_o$ . Because the total diet is not derived from food-producing animals, FDA will make corrections for food intake. FDA will designate as  $S_m$  the concentration of residue of carcinogenic concern that is permitted in a specific edible product.

#### **§ 500.86 Marker residue and target tissue.**

(a) For each edible tissue, the sponsor shall measure the depletion of the residue of carcinogenic concern until its concentration is at or below  $S_m$ .

(b) In one or more edible tissues, the sponsor shall also measure the depletion of one or more potential marker residues until the concentration of the residue of carcinogenic concern is at or below  $S_m$ .

(c) From these data, FDA will select a target tissue and a marker residue and designate the concentration of marker residue ( $R_m$ ) that the regulatory method must be capable of measuring in the target tissue. FDA will select  $R_m$  such that the absence of the marker residue in the target tissue above  $R_m$  can be taken as confirmation that the residue of carcinogenic concern does not exceed  $S_m$  in each of the edible tissues and, therefore, that the residue of carcinogenic concern in the diet of people does not exceed  $S_o$ .

(d) When a compound is to be used in milk- or egg-producing animals, milk or eggs must be the target tissue in addition to the tissue selected to monitor for residues in the edible carcass.

(Approved by the Office of Management and Budget under control number 0910-0228)

#### **§ 500.88 Regulatory method.**

(a) The sponsor shall submit for evaluation and validation a regulatory method developed to monitor compliance with FDA's operational definition of no residue.